

approach would also raise issues of confidence in international data quality. The final and most pragmatic option is to refine and employ operation-specific risk models based on contemporary UK data, such as the UK Bayes model for coronary surgery<sup>8</sup> and a generic valve model.<sup>15</sup> These could be updated on an annual basis, as is the New York registry.

The approach to risk adjustment in terms of predictive accuracy, discrimination and frequency of recalibration is determined by what we are trying to achieve. There are three models encapsulating the reasons for publishing this sort of data at an institutional or an individual level.<sup>16</sup>

The first is a public accountability model which sees public disclosure as a public responsibility, irrespective of the consequences whereby release of the data, in conjunction with appropriate education and subsequent informed debate, will help clarify important societal issues and also improve standards.

The second is a market-oriented model, which assumes that the provision of comparative data will allow informed and willing consumers to drive quality improvement through selective purchasing or utilisation behaviour. To make valid and fair comparisons the data need to be standardised.

Finally, a professionally driven model assumes healthcare professionals have a desire to monitor and improve standards. This is generally motivated by a desire to retain autonomy in the face of greater governmental regulation. Providing data on variations aids this process, and publication increases provider responsiveness. The data act as a catalyst to identify and solve problems, and publication turns up the heat.

These models are not mutually exclusive, and the publication of cardiac surgical results in the UK has been driven to a variable extent by all three models. However, the choice of logistic EuroSCORE and the mode of presentation on the Healthcare Commission website was primarily to demonstrate compliance with a widely accepted European standard and not to provide graduated, categorical data to facilitate ranking of surgeons under the guise of "patient choice".

## NEW HORIZONS

The venture has been a success. It is now time for us to tighten the standard and add additional data on hospital facilities, processes and other outcomes relating to morbidity, such as re-sternotomy and length of stay, in order to paint a more holistic picture of cardiac surgery in the UK.

What does this signal for cardiology and other specialties? The New York State Department of Health has published an operator-specific angioplasty report since 1995.<sup>14</sup> The Chief Medical Officer's consultation on revalidation,<sup>17</sup> coupled with

the desire of the Department of Health in England to see publication of unit-specific, specialty-based outcomes to underpin patient choice, will bring urgent pressure to bear on other interventional specialties, including cardiology, to identify useful outcome measures that can be risk adjusted.

Competing interests: BEK is President of the Society for Cardiothoracic Surgery in Great Britain and Ireland, and a Commissioner on the Healthcare Commission.

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